

ABSTRACT

Methods of production of desired recombinant proteins, polypeptides and peptides are disclosed which utilize mammalian host cells engineered for autonomous and regulated growth in low cost protein/serum-free culture media. Preferred host cells express insulin or an insulin-like growth factor, and/or transferrin and are engineered so that addition of an inducer (e.g.,  $ZnCl_2 + CdCl_2$ ) halts growth and simultaneously induces the expression of the desired recombinant protein, polypeptide or peptide.